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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,276	08/26/2003	Steven L. Schmidt	08500.7245-02000	2646

21127 7590 09/08/2006

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EXAMINER

RONESI, VICKEY M

ART UNIT PAPER NUMBER

1714

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/647,276

Applicant(s)

SCHMIDT ET AL.

Examiner

Vickey Ronesi

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 28-68, 76 and 77 is/are pending in the application.
- 4a) Of the above claim(s) 45-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-44, 76 and 77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. All outstanding objections and rejections, except for those given below, are withdrawn in light of applicant's amendment filed 6/19/2006.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

3. New grounds of rejection are set forth below in view of applicant's arguments. Thus, *a 2<sup>nd</sup> non-final Office action is set forth as follows.*

#### *Claim Rejections - 35 USC § 103*

4. Claims 28-32, 35-44, and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US 6,239,210, cited on IDS dated 12/16/2004) in view of Burkett et al (US 5,539,078).

With respect to claims 28-32 and 35-44, the rejection is adequately set forth in paragraph 6 of Office action mailed 2/27/2006 and is incorporated here by reference.

With respect to claims 76, Kim et al teaches a transition metal catalyst such as cobalt octoate (col. 10, lines 47-51; abstract).

5. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US 6,239,210) in view of Burkett et al (US 5,539,078) and further in view of Pushee et al (US 4,392,804, cited on IDS dated 12/16/2004).

The discussion with respect to Kim et al and Burkett et al in paragraph 4 above is incorporated here by reference.

Neither Kim et al nor Burkett et al teaches specific reduced pressure atmosphere or the amount of time required for solid-stating.

Pushee et al discloses solid stating of PET and teaches that, in the manufacture of PET bottles, it is a requirement that high orientation is obtained which provides for a bottle having the necessary strength while permitting the use of a minimum amount of resin. To obtain such, solid stating in the presence of either a high vacuum (i.e., reduced pressure atmosphere) or an inert gas (i.e., inert gas atmosphere) such as nitrogen is used for up to 24 hours (Table bridging cols. 3 and 4), which would intrinsically aid in enhancing the oxygen-scavenging capability of the composition. A preferred vacuum is 0.1-0.5 mm of mercury (i.e., 13-67 N/m<sup>2</sup>) (col. 3, line 4).

Given that solid stating requires a pressure of 13-67 N/m<sup>2</sup> and a time period of up to 24 hours as taught by Pushee et al, it would have been obvious to one of ordinary skill in the art to utilize those conditions taught by Pushee et al in the solid stating taught by the combination of Kim et al and Burkett et al.

6. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US 6,239,210, cited on IDS dated 12/16/2004) in view of Burkett et al (US 5,539,078) and further in view of Katsumoto et al (US 5,776,361, cited on IDS dated 12/16/2004).

The discussion with respect to Kim et al and Burkett et al in paragraph 4 above is incorporated here by reference.

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While Kim et al teaches a transition metal catalyst such as cobalt octoate (col. 10, lines 47-51; abstract), it fails to teach the use of cobalt neodecanoate as the transition metal catalyst.

Katsumoto et al discloses an oxygen scavenging composition comprising a cobalt catalysts such as cobalt neodecanoate (col. 3, lines 50-51).

Given that Kim et al is open to the use of cobalt catalysts and further given that Katsumoto et al teaches that cobalt neodecanoate is advantageously used in oxygen scavenging compositions like taught by Kim et al, it would have been obvious to one of ordinary skill in the art to utilize cobalt neodecanoate as the transition metal catalyst of Kim et al.

### *Response to Arguments*

7. Applicant's arguments filed 6/19/2006 have been fully considered but they are not persuasive. Specifically, applicant argues that increasing the intrinsic viscosity helps achieve high orientation which teaches away from Kim et al which teaches minimizing orientation;

In response to the argument, the examiner agrees that Kim et al minimizing orientation, however, Burkett et al does not teach orientation of the composition to form a bottle. Rather, Burkett et al teaches that the intrinsic viscosity is increased by solid stating, wherein increasing intrinsic viscosity is not necessarily correlated to achieving high orientation or obtaining undesirable levels of haze. While increased intrinsic viscosity (i.e., increased molecular weight) helps to achieve high orientation, Burkett et al does not necessarily teach such. Specifically, Burkett et al teaches that polyester resins suitable for use as bottle resins are subjected to solid stating.

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*Conclusion*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/31/2006  
Vickey Ronesi



  
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SUPERVISORY PATENT EXAMINER  
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